

## **FBI Friction Ridge Discipline Procedures for Management of Examination Resources and Services**

### **1 Scope**

These procedures apply to personnel who use and/or maintain equipment, chemicals, supplies, and services that have an effect on the reliability of friction ridge print forensic examinations.

### **2 FBI Laboratory Friction Ridge Discipline Equipment, Chemicals, Supplies and Services**

The FBI Laboratory Friction Ridge Discipline Unit Chiefs will ensure that all activities associated with the FBI Laboratory Friction Ridge Discipline equipment, chemicals, supplies and services in their respective units are conducted according to the practices stated in the FBI Laboratory Quality Assurance Manual and the FBI Laboratory Operations Manual in addition to the procedures described in this document and that the proper records are retained.

#### **2.1 Software**

Software used by the FBI Laboratory Friction Ridge Discipline that meets the requirements listed below will be considered equipment and will abide by the same requirements.

- Software that may significantly and adversely affect the integrity of friction ridge print images or supporting data (e.g., digital history),
- Software that produces reportable statistical conclusions based on friction ridge print information, or
- Software that is validated by the FBI Laboratory Friction Ridge Discipline.

Software in general use that does not fall under the conditions listed above is not considered equipment and does not fall under Laboratory or discipline requirements.

### **3 Equipment Calibration, Performance Check, and Maintenance Procedures**

#### **3.1 Calibration**

None of the equipment used in the FBI Laboratory Friction Ridge Discipline requires calibration. While equipment needs to operate within the parameters appropriate to the type and purpose, calibration does not have a significant effect on the quality of the examinations conducted.

### **3.2 Performance Checks and Maintenance Procedures**

All FBI Laboratory Friction Ridge Discipline equipment will function within reasonable standards according to manufacturer's specifications. All maintenance can be performed by internal personnel or by an outside vendor, as appropriate. Any FBI Laboratory Friction Ridge Discipline equipment found to be not functioning properly will be removed from service and a notification will be placed on the item. A successful performance check is required before the equipment can be placed back into service.

All equipment used for processing examinations at a non-FBI laboratory controlled space must be performance checked prior to or at the time of use. A successful performance check for any non-light source equipment must be recorded in the case records at least once in each 24-hour period of use.

#### **3.2.1 Cyanoacrylate Fuming Chambers**

Each FBI Laboratory Friction Ridge Discipline mechanized cyanoacrylate fuming chamber (superglue chamber) will be serviced as needed and appropriate records will be retained.

#### **3.2.2 Microscopes and Macroscopes**

Each FBI Laboratory Friction Ridge Discipline microscope/macroscope used to examine evidence will be serviced as needed and appropriate records will be retained.

#### **3.2.3 Humidity Chambers and Ovens**

The humidity chambers and ovens are serviced annually to ensure that they are functioning within the appropriate parameters. A record of the service will be retained.

#### **3.2.4 Forensic Light Sources**

Each Forensic Light Source is checked prior to being placed in service, either initially or after repair. A record of the check will be retained. Thereafter, Forensic Light Sources are inherently checked for performance with every use. If any forensic light source fails to operate, the equipment is taken out of service until it is repaired.

#### **3.2.5 Digital Imaging Equipment**

##### **3.2.5.1 Performance and Maintenance**

Each FBI Laboratory Friction Ridge Discipline owned digital capture device or hardcopy export device (e.g., camera, scanner, printer) will be serviced according to maintenance agreements and/or as needed. The record of service is retained. Equipment owned by external bodies will be serviced by them according to their requirements.

### **3.2.5.2 Security and Access**

Access to all appropriate digital imaging applications used by the FBI Laboratory Friction Ridge Discipline is controlled by the respective owners (i.e. Next Generation Identification System access is controlled by the Criminal Justice Information Services Division). Access to applications are controlled and require user names, passwords, and other security access requirements.

### **3.2.5.3 Data Back-Up**

Data within all appropriate digital imaging applications used by the FBI Laboratory Friction Ridge Discipline is protected according to requirements set forth by the system owners. Any required checks will be recorded and retained by the system owner.

## **3.3 Performance Checks and Maintenance Records**

The Latent Print Operations Unit Chief and the Scientific and Biometrics Analysis Unit Chief will ensure all records for FBI Laboratory Friction Ridge Discipline's laboratory equipment performance checks and maintenance are retained for their respective locations. The Latent Print Support Unit Chief will ensure any necessary routine performance checks and maintenance records for digital imaging equipment are retained.

## **4 Procedures for Procurement, Reception, and Storage of Chemicals**

### **4.1 Procurement of Chemicals**

A Laboratory Manager will ensure all purchase requests for all FBI Laboratory Friction Ridge Discipline chemicals are prepared according to FBI and/or Laboratory Division procurement regulations in addition to the appropriate sections of the FBI Laboratory Quality Assurance Manual.

### **4.2 Record of Receipt**

The receipt of all purchased FBI Laboratory Friction Ridge Discipline chemicals will be recorded by the discipline personnel receiving the order. The following steps will occur:

- Chemicals are received in the Laboratory.
- Inventory is conducted to ensure all ordered chemicals were received and comply with any specifications defined in the associated technical procedure(s).
- If required, chemicals receive a barcode from appropriate Safety Manager/Specialist(s).

### **4.3 Storage of Chemicals**

All chemicals in FBI Laboratory Friction Ridge Discipline will be stored in the appropriate storage locations. Storage conditions, as defined by the manufacturer of the chemical, will be met.

#### **4.3.1 Commercial FBI Laboratory Friction Ridge Discipline Chemicals**

##### **4.3.1.1 Barcoded Quantico Chemicals**

- All chemicals barcoded by the Safety Manager/Specialist(s) are either taken directly to Latent Print Operations Unit laboratory space or stored in room 1354 or room 1351 until needed.
- When Latent Print Operations Unit personnel remove chemicals from Room 1354 or room 1351, a Chemical Transfer Log is completed. This log notifies Safety Manager/Specialist(s) of the new storage area for the chemical(s).
- After a chemical container is empty, Latent Print Operations Unit personnel provide the barcode(s) information from the container to Safety Manager/Specialist(s).

##### **4.3.1.2 Barcoded Huntsville Chemicals**

- Scientific and Biometric Analysis Unit personnel provide the Safety Manager/Specialist(s) with an inventory of received chemicals.
- The Safety Manager/Specialist(s) provide barcodes for the chemical containers.
- After a chemical container is empty, the Scientific and Biometric Analysis Unit personnel provide the barcode(s) information from the container to the Safety Manager/Specialist(s).

### **4.4 FBI Laboratory Friction Ridge Discipline Chemical Solutions**

All chemical solutions retained within the FBI Laboratory Friction Ridge Discipline will be stored according to the applicable document(s) within the FBI Laboratory Friction Ridge Discipline Processing Manual and the FBI Laboratory Safety Manual. Reagents or other chemicals requiring a performance check are tested per the applicable document(s) within the FBI Laboratory Friction Ridge Discipline Processing Manual. Records of the performance checks are maintained within the FBI Laboratory Friction Ridge Discipline and/or in the case records, as appropriate.

### **4.5 Disposal**

FBI Laboratory Friction Ridge Discipline chemicals, including their containers, are disposed of according to the FBI Laboratory Safety Manual.

## **5 Evaluation of FBI Laboratory Friction Ridge Discipline Products and Services Suppliers**

All suppliers of products and services that affect the FBI Laboratory Friction Ridge Discipline laboratory activities will be evaluated at least the first time the supplier is used and a record of these evaluations will be retained. The FBI Laboratory Friction Ridge Discipline Unit Chiefs will ensure a list of discipline approved suppliers of products and services will be maintained for their respective units. Suppliers may be re-evaluated as needed.

## **6 References**

FBI Laboratory Quality Assurance Manual. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

FBI Laboratory Safety Manual. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

Federal Acquisition Regulation, Latest Revision.

FBI Friction Ridge Discipline Processing Manual, Various Standard Operating Procedures for Processes Used to Develop Latent Prints. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

Rev. #	Issue Date	History
2	08/21/19	Minor wording changes throughout document. Scope expanded and external bodies added throughout document. Section 1, software added. Section 3.1 added. Section 4.2, “processing” added. Section 4.2.3 through Section 4.2.3.2 changed to Section 4.2.5 through Section 4.2.5.3 and Section 4.2.4 and Section 4.2.5 renumbered accordingly. Section 5.2, bullet two, added compliance requirement. Section 5.3.1.2, replace Laboratory Manager with general unit personnel. Section 6, updated to apply to all products and services. Appendix A, form removed.
3	07/15/21	Replace Latent Print Units with Friction Ridge Discipline. Minor wording changes. Changed Title. Remove Section 1 and renumbered. Section 1, changed validity to reliability. Section 3.2, removed latent print. Section 3.2.5.2 and Section 3.2.5.3, updated information. Section 3.3, changed to “any necessary”.

### **Approval**

**Redact - Signatures on File**

Friction Ridge Discipline  
Technical Leader

Date: 07/14/2021

Latent Print Operations  
Unit Chief

Date: 07/14/2021

Latent Print Support Unit  
Chief

Date: 07/14/2021

Scientific and Biometrics  
Analysis Unit Chief

Date: 07/14/2021

### **QA Approval**

Quality Manager

Date: 07/14/2021